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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/567,829

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Mitsuo Sasaki

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FOLEY AND LARDNER LLP
SUITE 500
3000 K STREET NW
WASHINGTON, DC 20007

EXAMINER

YEAGLEY, DANIEL S

ART UNIT

PAPER NUMBER

3611

MAIL DATE

DELIVERY MODE

12/30/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/567,829	Applicant(s) SASAKI ET AL.	
	Examiner Daniel Yeagley	Art Unit 3611	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 September 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) 12-20 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 February 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>2/10/06, 10/30/07</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

1. Applicant's election of Group I; Species 1 in the reply filed on 9/10/08 is acknowledged. Claims 12 – 20 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected Group and Species, there being no allowable generic or linking claim. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

Specification

2. The disclosure is objected to because of the following informalities:

a. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally **limited to** a single paragraph on a separate sheet within the range of **50 to 150 words**. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited.

The **form and legal phraseology** often used in patent claims, **such as "means" and "said," should be avoided**. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc. See MPEP § 608.01(b).

b. The numbering of the claims may change throughout prosecution of the application. Therefore the referencing of such claim numbers; as in pages 3 – 5 and pages 75 – 78 should be avoided.

Appropriate corrections are required.

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3. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1 – 4 and 10 are rejected under 35 U.S.C. 102(b) as being anticipated by Hyodo JP4173476 (IDS).

Hyodo shows a power steering system that assists a steering force of a steering mechanism turning steered road wheels comprising a motor driven first hydraulic pressure supply means (reversible pump 7) that supplies hydraulic pressure via fluid passages to first and second hydraulic chambers of a hydraulic power cylinder 5 (figure 1 - 2), and further shows a second hydraulic pressure supply means (figure 1 – 3) that selectively supply hydraulic pressure via further fluid passages and control valves to either one of the first and second hydraulic chambers of the hydraulic power cylinder; as shown in figures 1 - 3, wherein the electric motor drives the reversible pump in a normal-rotational or reverse-rotational direction, a control unit 11 outputs a command signal to a motor responsive to a driver's steering state via a steering-state detection means that detect a driver's steering state and further discloses a failure detection means which detects a failure in the first hydraulic pressure supply means and operates the second hydraulic pressure supply means (page 2 – page 4), and is such that a working-fluid

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discharge characteristic of the first hydraulic pressure supply means differs from a working-fluid discharge characteristic of the second hydraulic pressure supply means. See also NPL filed 10/30/07.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hyodo JP'476 (IDS), in view of Frank et al 5,267,627.

Hyodo; as stated above disclosed a power steering system having a control means which outputs a command signal to a motor by a steering state detection means, but failed to disclose a steering torque detection means.

Frank discloses a power steering system with a first and second hydraulic pressure supply means (figure 6), which further discloses the art of using a control signal from a steering state detection means being a steering torque detection means that detects a steering torque exerted on a steering shaft that is linked to a steering mechanism; as claimed, and wherein the first hydraulic pressure supply only operates when the torque detected by the steering torque detection means is less than a predetermined value (within a predetermined range; figure 2-3, column 2 - 6).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the steering control means of Hyodo's steering system and only

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operated the first hydraulic pressure supply means when a torque value of the steering input is less than a predetermined value; as suggested by Frank to better control the system when the vehicle speed is low as taught by Frank.

8. Claims 5 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hyodo JP'476 (IDS), in view of JP11034770 (NPL filed 10/30/07).

Hyodo discloses the power steering system; as stated above, but lacked the time dependent limitation as claimed.

The JP'770 reference (page 4 – 8); as noted in applicants NPL filed 10/30/07, cites the prior art of a time limitation that operates the pressure in the steering system using the control unit to keep the second hydraulic pressure supply operating for a predetermine time; as claimed (NPL pages 4 – 5).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the pressure control means of Hyodo and maintained the pressure in the second hydraulic pressure supply means of Hyodo for an extended period of time for enhanced steering control; as suggested by the JP'770 reference as best understood, in order to maintain an extended assist pressure from the second pressure source for an extended period of time before shifting the second pressure supply to a stopped state after a predetermined operating time has expired, as taught by the JP'770 reference as understood.

9. Claims 7 – 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hyodo JP'476 (IDS), in view of Bohner et al 6,279,675.

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Hyodo; as stated above, disclosed a power steering system having a control means which outputs a command signal to a motor by a steering state detection means and a failure detection means that detects a failure in the first hydraulic pressure supply means, but failed to disclose the means for detecting the failure in the first hydraulic supply means based on a specific system value; such as a current or speed value of the motor or a torque signal value from a steering input means for detecting a failure in the first hydraulic supply means.

Bohner; is cited, as suggesting the prior art of utilizing a current and/or torque value of a steering system to determine if an error exists in a steering system of a pressure supply steering system (figure 1, column 5).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have utilized commonly available steering system values within a steering system, such as a torque value from a steering input or a speed or current value of a motor of the steering system as a simple means for monitoring Hyodo's power steering system, in order to provide a commonly known means for detecting a malfunction in a system to provide an enhanced means for better monitoring the system for errors; as suggested by Bohner, in order to be able to better correct the operation of the assisted steering operation of Hyodo steering system when a failure is detected, as suggested by monitored control system of Bohner.

Conclusion

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Baatrup et al '921, Kahrs et al '007, Hagidaira et al '415, Pollner et al JP'536, Kubo JP'662, Hasegawa JP'469 and Sonoda JP'266 show a power steering system with a first and second pressure supply means.

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11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Daniel Yeagley whose telephone number is (571)272-6655. The examiner can normally be reached on Monday - Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lesley D. Morris can be reached on (571) - 272 - 6651. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

D.Y.

/Paul N. Dickson/

Supervisory Patent Examiner, Art Unit 3611